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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/736,089	12/15/2003	Ajith K. Kumar	132250NPGETS 5314.1	3281
321 7590 04/18/2008 SENNIGER POWERS LLP ONE METROPOLITAN SQUARE 16TH FLOOR ST LOUIS, MO 63102				
EXAMINER MANCHO, RONNIE M				
ART UNIT 3663		PAPER NUMBER		
NOTIFICATION DATE 04/18/2008		DELIVERY MODE ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

uspatents@senniger.com

### Office Action Summary

**Application No.**

10/736,089

**Applicant(s)**

KUMAR ET AL.

**Examiner**

RONNIE MANCHO

**Art Unit**

3663

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 3, 8, 14-16, 18-22, 26, 50, 52-58, 62 and 76 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1, 3, 8 is/are allowed.
- 6) ☒ Claim(s) 14-16, 18-22, 26, 50, 52-58, 62, 76 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 14-16, 18-22, 26, 50, 52-58, 62, 76 rejected under 35 U.S.C. 102(b) as being anticipated by Polivka et al (5828979)

Regarding claim 14, Polivka et al (figs. 2, 4-14; col. 4, lines 39-67; col. 5, lines 1-64; col. 6, lines 36-64; col. 7, lines 3-67; col. 8, lines 1-67) disclose a multi-level system for management of a railway system and its operational components, the railway system comprising:

a first level (col. 4, lines 39-67; col. 5, lines 1-64) configured to control a servicing operation within the first level, said first level including first level operational parameters defining operational characteristics of service facilities of the railroad infrastructure and data of the first level; and

a second level (col. 4, lines 39-67; col. 5, lines 1-64) configured to control an operation within the second level, said second level including second level operational parameters defining the operational characteristic and data of the second level over time, wherein the second level is a sub-level of said first level;

said first level providing the second level with the first level operational parameters (col. 4, lines 39-67; col. 5, lines 1-64; col. 6, lines 36-64) at regular scheduled intervals, and the

second level providing the first level (see signal flow, figs. 2, 4-14) with the second level operational parameters at periodic intervals (col. 7, lines 29-49); and

said controlling the operation within the first level and said controlling the operation within the second level each being a function of the first and second level operational parameters (col. 4, lines 39-67; col. 5, lines 1-64).

Regarding claim 15, Polivka et al (figs. 2, 4-14; col. 4, lines 39-67) the system of claim 14 wherein the first level operational parameter and second level operational parameter are indicative of fuel usage in the railway system.

Regarding claim 16, Polivka et al (figs. 2, 4-14; col. 4, lines 39-67) the system of claim 14 wherein the first level operational parameter and second level operational parameter are indicative of an economic valuation of the time of delivery of cargo carried in the railway system.

Regarding claim 18, Polivka et al (figs. 2, 4-14; col. 4, lines 39-67) the system of claim 14 wherein the operational parameters are indicative of predetermined changes in conditions over a period of time (col. 7, lines 29-49).

Regarding claim 19, Polivka et al (figs. 2, 4-14; col. 4, lines 39-67) system of claim 18 wherein the operational parameters are indicative of a rate of change in the conditions.

Regarding claim 20, Polivka et al (figs. 2, 4-14; col. 4, lines 39-67; col. 5, lines 1-64; col. 6, lines 36-64; col. 7, lines 3-67; col. 8, lines 1-67) disclose the system of claim 19 wherein the rate of change is with respect to time (col. 7, lines 29-49).

Regarding claim 21, Polivka et al (figs. 2, 4-14; col. 4, lines 39-67; col. 5, lines 1-64; col. 6, lines 36-64; col. 7, lines 3-67; col. 8, lines 1-67) disclose the system of claim 19 wherein the rate of change is the change in one condition with respect to another (col. 7, lines 39-67).

Regarding claim 22, Polivka et al (figs. 2, 4-14; col. 4, lines 39-67; col. 5, lines 1-64; col. 6, lines 36-64; col. 7, lines 3-67; col. 8, lines 1-67) disclose the system of claim 14 wherein an operational parameter of the second level relevant to the system optimization parameter is communicated periodically from the second level to the first level for adjusting the first and second level operational parameters based thereon.

Regarding claim 26, Polivka et al (figs. 2, 4-14; col. 4, lines 39-67; col. 5, lines 1-64; col. 6, lines 36-64; col. 7, lines 3-67; col. 8, lines 1-67) disclose the system of claim 22 wherein controlling the operation within the first level and controlling the operation within the second level includes identifying operating constraints and data at one of the first and second level and communicating the operating constraints and data to another of the first and second level to improve performance of operation at the another level.

Regarding claim 50, Polivka et al (figs. 2, 4-14; col. 4, lines 39-67; col. 5, lines 1-64; col. 6, lines 36-64; col. 7, lines 3-67; col. 8, lines 1-67) disclose a system for management of a railway system and its operational components, the railway system comprising:

a first level (col. 4, lines 39-67; col. 5, lines 1-64; col. 6, lines 36-64) including first level operational parameters defining operational characteristics of service facilities of the railway system and data of the first level; and

a second level (col. 4, lines 39-67; col. 5, lines 1-64; col. 6, lines 36-64) including second level operational parameters configured to control an operation within the second level as a

function of the first level operational parameters and second level operational parameters and wherein the second level operational parameters are indicative of changes in operational characteristics and data of the second level (col. 7, lines 3-67; col. 8, lines 1-67), wherein the second level is a sub-level of said first level; and

said second level continuously providing the first level with second level operational parameters (see signal exchange, figs. 2, 4-14), and wherein said first level continuously determines the first operational parameters as a function of the provided second level operational parameters..

Regarding claim 52, Polivka et al (figs. 2, 4-14; col. 4, lines 39-67; col. 5, lines 1-64; col. 6, lines 36-64; col. 7, lines 3-67; col. 8, lines 1-67) disclose the system of claim 51 wherein the first and second level operational parameters are indicative of a change in fuel usage in the railway system.

Regarding claim 53, Polivka et al (figs. 2, 4-14; col. 4, lines 39-67; col. 5, lines 1-64; col. 6, lines 36-64; col. 7, lines 3-67; col. 8, lines 1-67) disclose the system of claim 51 wherein the first and second level operational parameters are indicative of a change in an economic valuation of the time of delivery of cargo carried in the railway system.

Regarding claim 54, Polivka et al (figs. 2, 4-14; col. 4, lines 39-67; col. 5, lines 1-64; col. 6, lines 36-64; col. 7, lines 3-67; col. 8, lines 1-67) disclose the system of claim 50 wherein the second level operational parameters are provided from the second level to the first level at predetermined intervals.

Regarding claim 55, Polivka et al (figs. 2, 4-14; col. 4, lines 39-67; col. 5, lines 1-64; col. 6, lines 36-64; col. 7, lines 3-67; col. 8, lines 1-67) disclose the system of claim 50 wherein the second level is a portion of the first level.

Regarding claim 56, Polivka et al (figs. 2, 4-14; col. 4, lines 39-67; col. 5, lines 1-64; col. 6, lines 36-64; col. 7, lines 3-67; col. 8, lines 1-67) disclose the system of claim 51 wherein the system operational parameter is indicative of a rate of change in second level operational parameters.

Regarding claim 57, Polivka et al (figs. 2, 4-14; col. 4, lines 39-67; col. 5, lines 1-64; col. 6, lines 36-64; col. 7, lines 3-67; col. 8, lines 1-67) disclose the system of claim 56 wherein the rate of change is with respect to time.

Regarding claim 58, Polivka et al (figs. 2, 4-14; col. 4, lines 39-67; col. 5, lines 1-64; col. 6, lines 36-64; col. 7, lines 3-67; col. 8, lines 1-67) disclose the system of claim 56 wherein the rate of change is the change in one condition with respect to another.

Regarding claim 62, Polivka et al (figs. 2, 4-14; col. 4, lines 39-67; col. 5, lines 1-64; col. 6, lines 36-64; col. 7, lines 3-67; col. 8, lines 1-67) disclose the system of claim 50 wherein the first level monitors whether or not the optimized second level operation is within predetermined limits.

Regarding claim 76, Polivka et al (figs. 2, 4-14; col. 4, lines 39-67; col. 5, lines 1-64; col. 6, lines 36-64; col. 7, lines 3-67; col. 8, lines 1-67) disclose the system of claim 1, wherein the generated data comprises at least one of: an operating command, an operational limitation, or information associated with the level generating said data.

*Allowable Subject Matter*

2. Claims 1, 3, 8 are allowed.
3. The following is an examiner's statement of reasons for allowance:

In independent claims 1, 3, 8, the prior art does not disclose:

"said first processor generating service plan data provided to at least one other processor of the system, said first processor responsive to generated data generated by at least one other processor of the system to define operational characteristics and performance data for the railroad infrastructure and to generate output instructions corresponding to the defined operational characteristics and performance data for the railroad infrastructure, and said first processor controlling the operation of service operations of the railroad infrastructure in accordance with the generated output instructions for the railroad infrastructure;

said second processor generating train movement plan data provided to at least one other processor of the system, said second processor responsive to service plan data provided by the first processor to define operational characteristics and performance data for the railroad infrastructure level and to generate output instructions corresponding to the defined operational characteristics and performance data for the railroad infrastructure level, and said second processor controlling the operation of the railroad infrastructure level in accordance with the generated output instructions for the railroad infrastructure level".

This statement is not intended to necessarily state all the reasons for allowance or all the details why the claims are allowed and has not been written to specifically or impliedly state that all the reasons for allowance are set forth (MPEP 1302.14).

The dependent claims are allowed for depending on an allowed base claim.



Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

*Response to Arguments*

4. Applicant's arguments filed 1/15/08 have been fully considered but they are all not persuasive.

The 112 rejections in the prior office actions have been withdrawn in view of applicant's amendments.

Claims 1, 3, 8 are allowed, thus all arguments there to are moot.

The rejections drawn to MPEP 2114/2115 have been vacated in view of applicant's amendments.

For the rest of the claims, applicant is arguing that the prior art disclose the limitations in the claims. The examiner disagrees. The applicant is making references to sections that are in contrast to the sections recited by the examiner. As in claims 14, it is believed that the prior art, Polivka et al (figs. 2, 4-14; col. 4, lines 39-67; col. 5, lines 1-64; col. 6, lines 36-64; col. 7, lines 3-67; col. 8, lines 1-67) disclose a multi-level system for management of a railway system and its operational components, the railway system comprising:

a first level (col. 4, lines 39-67; col. 5, lines 1-64) configured to control a servicing operation within the first level, said first level including first level operational parameters

defining operational characteristics of service facilities of the railroad infrastructure and data of the first level; and

a second level (col. 4, lines 39-67; col. 5, lines 1-64) configured to control an operation within the second level, said second level including second level operational parameters defining the operational characteristic and data of the second level over time, wherein the second level is a sub-level of said first level;

said first level providing the second level with the first level operational parameters (col. 4, lines 39-67; col. 5, lines 1-64; col. 6, lines 36-64) at regular scheduled intervals, and the second level providing the first level (see signal flow, figs. 2, 4-14) with the second level operational parameters at periodic intervals (col. 7, lines 29-49); and

said controlling the operation within the first level and said controlling the operation within the second level each being a function of the first and second level operational parameters (col. 4, lines 39-67; col. 5, lines 1-64).

As in claims 50, it is believed that the prior art, Polivka et al (figs. 2, 4-14; col. 4, lines 39-67; col. 5, lines 1-64; col. 6, lines 36-64; col. 7, lines 3-67; col. 8, lines 1-67) disclose a system for management of a railway system and its operational components, the railway system comprising:

a first level (col. 4, lines 39-67; col. 5, lines 1-64; col. 6, lines 36-64) including first level operational parameters defining operational characteristics of service facilities of the railway system and data of the first level; and

a second level (col. 4, lines 39-67; col. 5, lines 1-64; col. 6, lines 36-64) including second level operational parameters configured to control an operation within the second level as a

function of the first level operational parameters and second level operational parameters and wherein the second level operational parameters are indicative of changes in operational characteristics and data of the second level (col. 7, lines 3-67; col. 8, lines 1-67), wherein the second level is a sub-level of said first level; and

said second level continuously providing the first level with second level operational parameters (see signal exchange, figs. 2, 4-14), and wherein said first level continuously determines the first operational parameters as a function of the provided second level operational parameters..

Applicant has failed to consider the sections particularly cited by the examiner.

It is believed that the rejections are proper and thus stand.

### *Communication*

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronnie Mancho whose telephone number is 571-272-6984. The examiner can normally be reached on Mon-Thurs: 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on 571-272-6878. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ronnie Mancho  
Examiner  
Art Unit 3663

4/12/2008

/Jack W. Keith/

Supervisory Patent Examiner, Art Unit 3663